

Amendments to the Claims

1. (CURRENTLY AMENDED) An integrated circuit ~~(1)~~, having a substrate ~~(3)~~ and having a signal-processing circuit ~~(4)~~, which signal-processing circuit ~~(4)~~ is produced in a region of the substrate ~~(3)~~ adjoining a surface ~~(8)~~ of the substrate ~~(3)~~ and has a plurality of circuit elements ~~(5, 6, 7)~~ and at least one first contact pad ~~(9)~~, wherein the first contact pad ~~(9)~~ has a first boundary face ~~(10)~~ accessible from outside the substrate ~~(3)~~ and a second boundary face ~~(11)~~ opposite from the first boundary face ~~(10)~~, wherein the first contact pad ~~(9)~~ is intended for the electroconductive connection of a component contact ~~(2)~~ of a circuit component external to the integrated circuit ~~(1)~~ to the signal-processing circuit ~~(4)~~, and having a protective layer ~~(12)~~ that is electrically insulating and provided on the surface ~~(8)~~ of the substrate ~~(3)~~ to protect the regions of the integrated circuit ~~(1)~~ covered by said protective layer ~~(12)~~, wherein for each first contact pad ~~(9)~~ an aperture ~~(13)~~ in the protective layer ~~(12)~~ is provided, wherein for each first contact pad ~~(9)~~ a second contact pad ~~(14)~~ is provided that is of a height ~~(h)~~ of at least 15 μm and is intended for direct connection to a component contact ~~(2)~~ and extends through the relevant aperture ~~(13)~~ to the first contact pad ~~(9)~~ and is electroconductively connected to the first contact pad ~~(9)~~ and is seated on the protective layer ~~(12)~~ by an overlap zone ~~(z)~~ that projects laterally beyond the aperture ~~(13)~~ and is closed on itself like a ring, wherein, along the whole of its ring-like extent, the overlap zone ~~(z)~~ projects beyond the aperture ~~(13)~~ laterally by substantially the same width of overlap ~~(w)~~, wherein the width of overlap ~~(w)~~ is in a range of between 2 μm and 15 μm , and wherein at least one element ~~(5)~~ of the signal-processing circuit ~~(4)~~ is provided opposite the second boundary face ~~(11)~~ of the first contact pad ~~(9)~~.

2. (CURRENTLY AMENDED) An integrated circuit ~~(1)~~ as claimed in claim 1, wherein only one capacitor ~~(5)~~ belonging to the signal-processing circuit ~~(4)~~ is provided opposite the second boundary face ~~(11)~~ of the first contact pad ~~(9)~~.

3. (CURRENTLY AMENDED) An integrated circuit ~~(1)~~ as claimed in claim 2, wherein the planar shape of the capacitor ~~(5)~~, which planar shape extends parallel to the surface ~~(8)~~ of the substrate ~~(3)~~, and the planar shapes of the second contact pad

~~(14)~~ and the aperture ~~(13)~~, which planar shapes also extend parallel to the surface ~~(8)~~ of the substrate ~~(3)~~, are substantially the same, and the area of the planar shape of the capacitor ~~(5)~~ is at most 10% larger than the area of the planar shape of the second contact pad ~~(14)~~.

4. (CURRENTLY AMENDED) An integrated circuit ~~(1)~~ as claimed in claim 2, wherein the capacitor ~~(5)~~ is formed by a multilayer capacitor.

5. (CURRENTLY AMENDED) An integrated circuit ~~(1)~~ as claimed in claim 2, wherein at least one metal layer ~~(26, 27)~~ is provided between the first contact pad ~~(9)~~ and the capacitor ~~(5)~~ as a mechanical protective layer for the capacitor ~~(5)~~.

6. (CURRENTLY AMENDED) An integrated circuit ~~(1)~~ as claimed in claim 2, wherein the first contact pad ~~(9)~~ comprises at least two metal layers ~~(28, 29)~~ that are connected together electrically and mechanically by electroconductive bridges ~~(31)~~.

7. (CURRENTLY AMENDED) An integrated circuit ~~(1)~~ as claimed in claim 1, wherein the width of overlap ~~(w)~~ is of a nominal value of 7 μm .